BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G53.120.2
Issue 1, May, 1952
AT&T Co Standard

BLOCK AND HOUSE CABLE

PLACING STRAND SUPPORTED CABLE ON STEEL FRAMEWORK INSIDE BUILDINGS

Contents **Page**

1. GENERAL

1.01 This section covers methods of attaching suspension strand and cable terminals to steel framework.

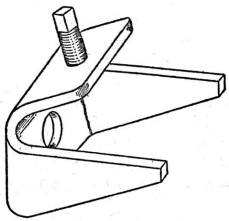
1.02 Varied types of steel construction will be encountered in field work and the methods suggested may require modification to fit the specific conditions.

1.03 In new buildings or proposed new structures consideration should be given by the Plant Engineer to have the builder provide suitable anchorage for dead-ending strand and facilities for supporting strand on columns and beams at intermediate points.

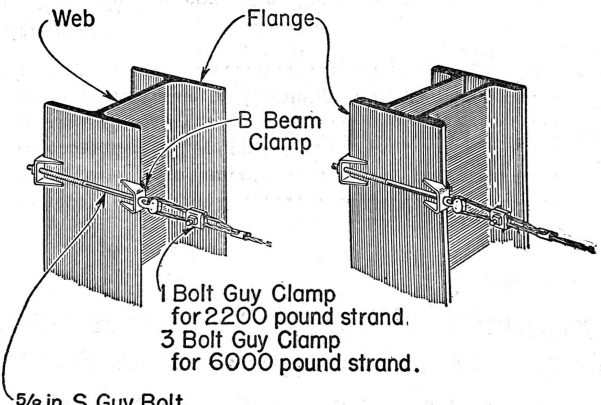
2. DEAD END ATTACHMENTS

2.01 Methods for dead-ending strand on columns and beams are illustrated below:

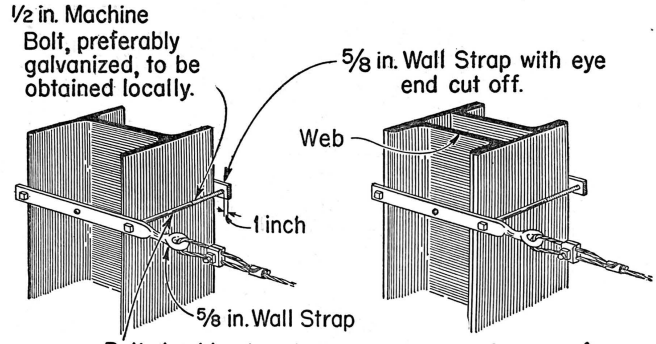
(a) **I or H Columns—Strand running parallel with flanges.**



B BEAM CLAMP

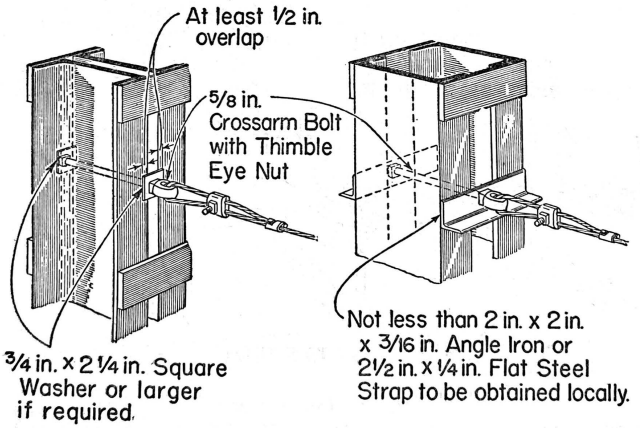


(b) **I or H Columns—Strand running parallel with web.**

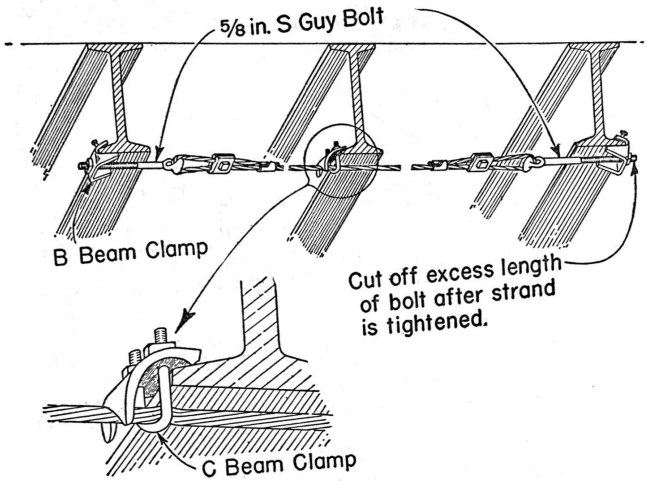


Bolt should not project more than 1 in. from surface of column. If existing holes in wall strap do not permit the bolts to fit snugly against column drill new 11/16 in. holes.

(c) **Built-up Columns.**



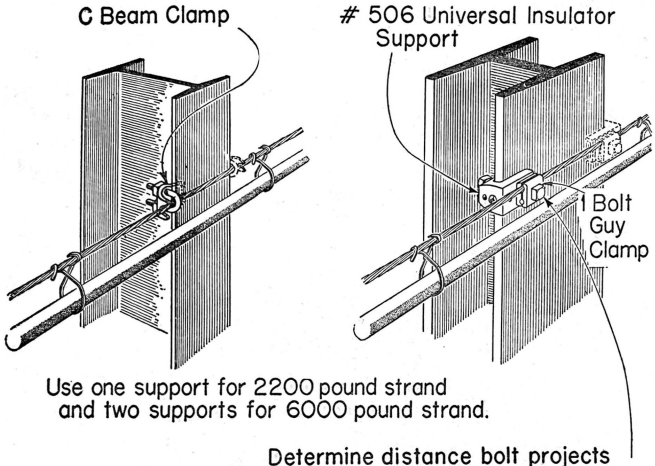
(d) **I Beams.** Locate Dead End attachments as close as practicable to vertical supports.

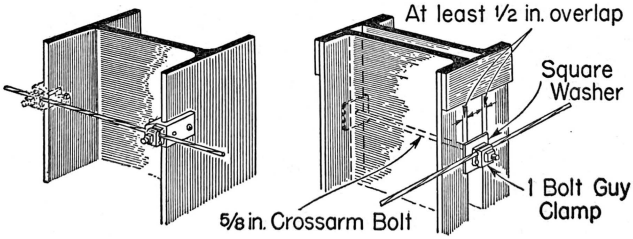


3. INTERMEDIATE SUPPORTS

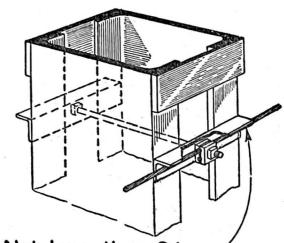
3.01 Intermediate attachments to the flanges of columns and beams are made as follows. **Intermediate supports shall be located approximately 40 feet apart.**

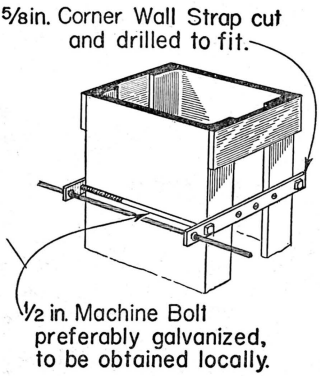
(a) **I or H Columns.**



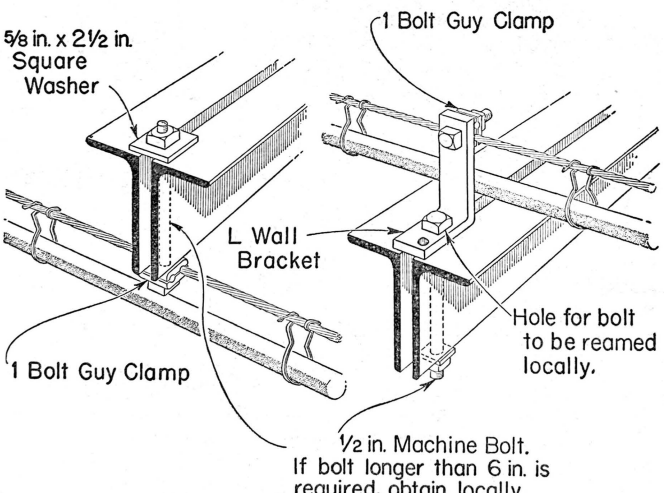


(b) **Built-up Columns.**



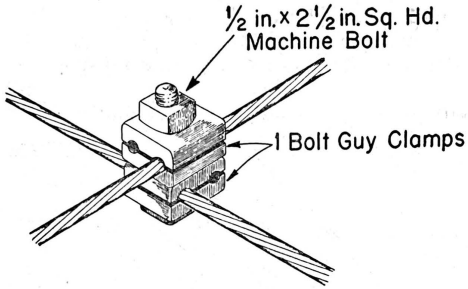


(c) **Steel Angle Structures.**



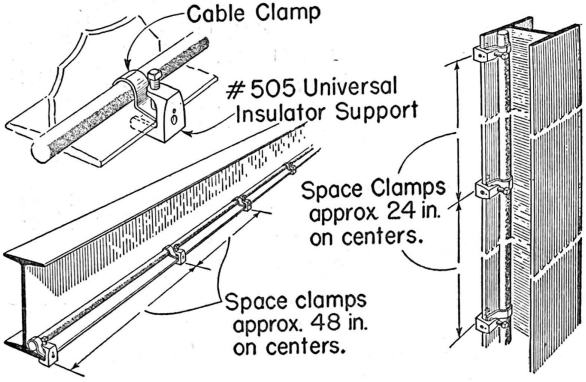
4. STRAND CROSSOVERS

4.01 Where one strand is to cross over another, place the strand of the smaller cable above the strand of the larger cable.

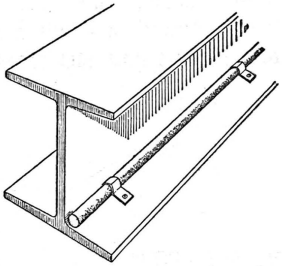


5. SUPPORTING CABLE ON COLUMNS AND I BEAMS

5.01 A cable may be supported horizontally or vertically on a steel column or I beam as shown in the illustrations on the following page.



If permission can be secured from property owner or his representative columns or beams may be drilled and tapped for 3/16 in. or 1/4 in. R.H. Machine Screws, depending on the size of cable clamps to be used.



6. TERMINALS

6.01 The following types of terminals shall be used in buildings:

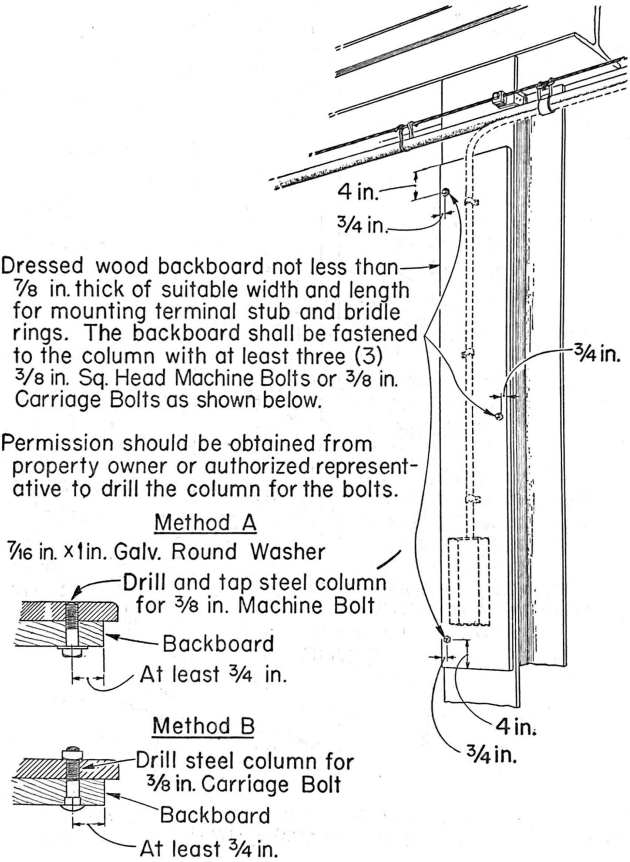
(a) On suspension strand use the N type distribution terminals. They shall be placed on the strand as illustrated in the section covering Cable on Strand in Buildings.

(b) On steel columns, wall, etc., use N type or Building Type Terminals. When placing N type terminals on steel columns, obtain permission to drill and tap four (4) holes for 1/4-in. x 1-1/2-in. R.H. machine screws. Use the mounting plate for the terminal as a templet to spot the holes in the column. Should a wooden backboard be

required in mounting the terminal on a steel column, it shall be placed as illustrated below.

Building terminals shall be placed in accordance with sections covering the installation of inside terminals.

6.02 Where permission can be obtained to drill a steel column or similar support, a wood backboard may be mounted as shown below.



6.03 Where permission cannot be obtained to drill the steel column a backboard may be mounted as illustrated below.